

Application No. 10/786,775
Amendment dated August 30, 2007
Reply to Office Action of May 31, 2007

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 29A. This sheet, which includes Fig. 29A, replaces the original sheet including Fig. 29A.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

REMARKS

Status Of Application

Claims 1-23 are pending in the application; the status of the claims is as follows:

Claims 1-7, and 9-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,092,569 B1 to Kinjo ("Kinjo") in view of U.S. Patent No. 6,160,581 to Higashihara et al. ("Higashihara").

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, is noted with appreciation.

The acknowledgement, in the Office Action, of a claim for foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received, is noted with appreciation.

Drawings

The indication, in the Office Action, that the Examiner has no objections to the drawings filed on February 25, 2004, is noted with appreciation. Fig. 29A has been corrected to change "DEGREEOR OR" to "DEGREE OR". The formal Replacement drawing is attached. Applicants respectfully request the approval of the Replacement drawing.

Claim Amendments

Claims 2, 3, 10, 11, 17, 18 and 21 have been amended to correct matters of form. These changes are not necessitated by the prior art, are unrelated to the patentability of the invention over the prior art, and do not introduce any new matter.

35 U.S.C. § 103(a) Rejection

The rejection of claims 1-7, and 9-23 under 35 U.S.C. § 103(a), as being unpatentable over Kinjo in view of Higashihara, is respectfully traversed based on the following.

Kinjo shows a scanner 12. The image data captured by scanner 12 is loaded into a prescan memory 52. A principal part extracting site 72A for operating on the image data includes a face contour/circular shape extracting section 78 and a skin color detection processing section 80. This is to determine if a face can be extracted from the image data. Skin color detection processing section 80 includes a condition changing subsection 80a for adjusting the skin color detection processing algorithm to adapt to changing image taking conditions (col. 11, lines 29-45).

Higashihara shows a camera 1 including a CCD 201. The initial charge storage time of the CCD is set in step P402. After capturing and processing the image signal (steps P403-P409), an integration operation is performed on the image signal P410. If the integral value is too low, it is determined that the image analog to digital conversion level is too low to be reliable P411. The charge storage time of the CCD is adjusted accordingly (P412) and image capture is repeated.

In contrast to the cited references, claim 1 includes:

- a shooting condition obtaining portion for obtaining information indicating conditions for shooting by the camera;

- a reliability calculation portion for calculating reliability of the feature that is detected by each of the feature detection portions in the conditions indicated by the information obtained by the shooting condition obtaining portion; and

- an object detection portion for detecting the object in the shot image in accordance with the features detected respectively by one or more of the plural feature detection portions from the shot image and the reliability of the features calculated by the reliability calculation portion.

Thus, claim 1 includes the limitation that, for each feature detected in the feature detection portions, reliability is calculated based on the shooting condition. The “reliability” determined in step P411 of Higashihara is not based on the shooting condition or any other external factor. It is only based on an integration of the image data itself. There is no suggestion in either of the cited references of “calculating reliability of the feature that is detected by each of the feature detection portions” using “the information obtained by the shooting condition obtaining portion.”

Further, Higashihara only determines a threshold level for the integration in step P411. There is no reliability factor determined in either reference. Therefore, there is no suggestion of “detecting the object in the shot image in accordance with ... the reliability of the features calculated by the reliability calculation portion” because neither reference suggests any type of reliability factor for anything to be in accordance with.

To support a *prima facie* case for obviousness, the cited references must show, singly or in combination, every limitation of the claim. MPEP § 2143.03. Therefore, the cited references do not support a *prima facie* case of obviousness of claim 1 and claim 1 is patentably distinct from the prior art. Claims 2-7 and 9 are dependent upon claim 1, and thus include every limitation of claim 1. Therefore, the cited references do not support a *prima facie* case of obviousness for claims 2-7 and 9 and claims 2-7 and 9 are patentably distinct from the prior art.

Also in contrast to the cited references, claim 10 includes:

- a shooting condition obtaining portion for obtaining information indicating conditions for shooting by the camera;
- a reliability calculation portion for calculating reliability of the feature that is detected by each of the feature detection portions in the conditions;
- an operation method decision portion for deciding an operation method for detecting the object in accordance with the reliability calculated by the reliability calculation portion for each feature detected by each of the feature detection portions; ...

As noted above, there is no suggestion in either of the cited references of “calculating reliability of the feature that is detected by each of the feature detection portions in the conditions” of “shooting by the camera.” In addition, as is also noted above, there is no reliability factor determined in either reference. Therefore, there is no suggestion of “deciding an operation method for detecting the object in accordance with the reliability calculated by the reliability calculation portion for each feature detected by each of the feature detection portions” because neither reference suggests any type of reliability factor to be in accordance with. Therefore, the cited references do not support a *prima facie* case of obviousness of claim 10 and claim 10 is patentably distinct from the prior art. Claims 11-15 are dependent upon claim 10, and thus include every limitation of claim 10. Therefore, the cited references do not support a *prima facie* case of obviousness for claims 11-15 and claims 11-15 are patentably distinct from the prior art.

Also in contrast to the cited references, claim 16 includes:

- a step of obtaining information indicating conditions for shooting by the camera;
- a step of calculating reliability of the feature that is detected by each of the feature detection methods in the conditions indicated by the obtained information; and
- a step of detecting the object in the shot image in accordance with the features detected respectively by one or more of the plural feature detection methods from the shot image and reliability of the features.

As noted above, there is no suggestion in either of the cited references of “calculating reliability of the feature that is detected by each of the feature detection methods in the conditions” of “shooting by the camera.” In addition, there is no reliability factor determined in either reference. Therefore, there is no suggestion of “detecting the object in the shot image in accordance with the ... reliability of the features” because neither reference suggests any type of reliability factor to be in accordance with. Therefore, the cited references do not support a *prima facie* case of obviousness of claim 16 and claim 16 is patentably distinct from the prior art. Claims 17 and 18 are dependent upon claim 16, and thus include every limitation of claim 16. Therefore, the cited references do not support a *prima facie* case of

obviousness for claims 17 and 18 and claims 17 and 18 are patentably distinct from the prior art.

Also in contrast to the cited references, claim 19 includes:

- obtaining information indicating conditions for shooting by the camera;
- calculating reliability of the feature that is detected by each of the feature detection methods in the conditions indicated by the obtained information; and
- detecting the object in the shot image in accordance with the features detected respectively by one or more of the plural feature detection methods from the shot image and the reliability of the features.

As noted above, there is no suggestion in either of the cited references of “calculating reliability of the feature that is detected by each of the feature detection methods in the conditions” of “shooting by the camera.” In addition, there is no reliability factor determined in either reference. Therefore, there is no suggestion of “detecting the object in the shot image in accordance with the ... reliability of the features” because neither reference suggests any type of reliability factor to be in accordance with. Therefore, the cited references do not support a *prima facie* case of obviousness of claim 19 and claim 19 is patentably distinct from the prior art.

Also in contrast to the cited references, claim 20 includes:

- a shooting condition obtaining portion for obtaining information indicating conditions for shooting by the video camera,
- a reliability calculation portion for calculating reliability of the feature that is detected by each of the feature detection portions in the conditions indicated by the information obtained by the shooting condition obtaining portion, and
- an object detection portion for detecting the object in the shot image in accordance with the features detected respectively by one or more of the plural feature detection portions from the shot image and the reliability of the features calculated by the reliability calculation portion.

As noted above, there is no suggestion in either of the cited references of “calculating reliability of the feature that is detected by each of the feature detection portions in the conditions” of “shooting by the video camera.” In addition, there is no reliability factor determined in either reference. Therefore, there is no suggestion of “detecting the object in the shot image in accordance with the ... reliability of the features calculated by the reliability calculation portion” because neither reference suggests any type of reliability factor to be in accordance with. Therefore, the cited references do not support a *prima facie* case of obviousness of claim 20 and claim 20 is patentably distinct from the prior art. Claims 21-23 are dependent upon claim 20, and thus include every limitation of claim 20. Therefore, the cited references do not support a *prima facie* case of obviousness for claims 21-23 and claims 21-23 are patentably distinct from the prior art.

Accordingly, it is respectfully requested that the rejection of claims 1-7, and 9-23 under 35 U.S.C. § 103(a) as being unpatentable over Kinjo in view of Higashihara, be reconsidered and withdrawn.

Objection to Claim 8

Claim 8 has been objected to as depending from a rejected base claim, *i.e.* claim 1. Applicants respectfully submit that claim 1 has been shown above to be patentably distinct from the prior art, and that the rejection of claim 1 should be reconsidered and withdrawn. Therefore, applicants request withdrawal of the objection to claim 8.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims.

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Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin LLP Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin LLP Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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